



Dart Hawkesbury
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D412-596-203
Job Sheet 148993



Part No: D412-596-203

Job Qty: 1 ea

Part Name: Stainless Steel Aft Crosstube - Extended Height 39"



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 9/30/17

Job Tracking No:

Due Date: 11/15/17

Created By: Mario Poulin

Type: Stock

Description:

Customer: Kestrel Aviation Pty Ltd (CKEST03)

325 Aerodrome Road Mangalore, Victoria, 3663 Australia

Note: DWG REV B U/R IPP REV:A NEW ISSUE JFS 13/03/22 VERIFY BY:DD

Ship Via:

Bill of Materials

Part/Part Name	Part Note	Serial
D412-596-203 Stainless Steel Aft Crosstube - Extended Height 39"	DWG REV B U/R IPP REV:A NEW ISSUE JFS 13/03/22 VERIFY BY:DD	
D3595-063-530 Rubber Cushion 0.63" Wide X 5.30" Long	DWG REV A IPP Rev:A New Issue 07-08-07 JLM Verified By:EC	
D412-596-203TRN Crosstube Aft Extended Turning Detail	DWG REV PA1 U/R SHEETS 1, 3 IPP REV: A NEW ISSUE JFS 13/03/22 VERIFY BY: DD	
D4909-1 Support	DWG REV A SHEETS 1,2 IPP REV:A NEW ISSUE 13-04-24 JLM VERIFIED BY:DD	
D4910-1 Chaffing Shield	DWG REV A IPP REV:A 13.08.21 NEW ISSUE DD VERF:JLM	
MS21920-26 Clamp		
MS21920-28 Clamp	DWG REV PA6	

Status: Stock

Part: **D412-596-203 B148993**

Created: 9/30/17 1:09 PM DART MICHAUD-
FEBRILLE,VICTORIA



Serial No: **S000219**

Printed By: Goldston, Justin 10/2/17 10:45 AM

Job Routing

Op No	Operation	Qty	Due Date	Standard		Workcenter/Supplier	
				Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time
90	Start up Operation	1 Ea	11/15/17	0.00	0.00	Start up container	
100	DC	1 pcs	11/15/17	0.00	0.00	DC	
200	Crosstubes	1 pcs	11/15/17	0.00	0.00	Crosstube	0.1071 (9.33)
240	Packaging	1 pcs	11/15/17	0.00	0.00	Packaging3	SimB OCT 16 10:17
250	QC21-FG	1 Ea	11/15/17	0.00	0.00	QC21	

Part Op 100 - Photocopy bluefile & type labels per PPPD412-596-203 CHG001

Descriptions: 200 - 1- Install center support using scoth-weld DP460 per QSI 015, as per DWG. note 12. A/R scoth-weld DP460 BATCH #: _____ 2- Install clamp with rubber cushion as per DWG. note 13 3- Abrade mating surfaces of support and crosstube with 400 grit sandpaper, clean the area with 4105S wash 'n' wipe 4- **IF NOT ALREADY PRESENT ON CHAFFING SHEILD.** Apply a thin coat of proseal 890 per QSI 015 on inside concave surface of chaffing shield and let cure per manufacturer's instructions. Install prosealed chaffing shield onto crosstube by applying a thin coat of proseal 890 onto crosstube. Be sure to eliminate any air gaps. A/R Proseal 890 Batch: _____ 5- Install supports clamps using DT _____ as per Dwg D412-596-203, Torque clamps on support to 80-100 IN-LBS. Torque clamps on chaffing shield to 40-50 IN-LBS. START CURE TIME: _____ FINISH CURE TIME: _____ PRIOR TO PACKAGING RE-CHECK TORQUE ON CLAMPS AFTER C
240 - Identify and pack for shipping as per PPPD412-596-203 Location: _____ PPP Rev: _____

Job BOM

Part / Item	Component Name	Quantity	Operation	Special Comments
D412-596-203 B148993		1 Ea (1 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D412-596-203 B148993	1	1	0	0

Part Specifications

Specifications could not be found.

Plex 10/1/17 1:44 PM Dart.Renwick.Jennifer

Work Order Summary

Thursday, September 28, 2017 8:53:55 AM

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Criteria : Work Order ID: 148993 Item ID: D412-596-203 Product Family CROSSTUBES
Work Order Start Dates 7/14/2016 to 7/14/2016 11:59:59 PM Work Order Required Dates 8/2/2016 to 8/2/2016 11:59:59 PM
All References
Work Order Status Released

Work Order ID 148993 Required Qty 1.0000 Status Code Released
Item ID D412-596-203 Accepted Qty 0.0000 Scrap Qty 0.0000
Item Name Stainless Steel Aft Crosstube - Extended Height 39"
Current Acct Value \$5,918.663

Start Date 7/14/2016 Required Date 8/2/2016 Completed Date

Standard	** Actual **		** Acct. Value **	** Variance **	** Variance % **
Direct Costs	Total	Each	Each	Each	Each
Material	\$3,570.518	\$0.000	\$3,607.862	\$3,607.862	100.00%
Labor	\$868.676	\$0.000	\$1,037.971	\$1,037.971	100.00%
Outplant	\$111.291	\$0.000	\$117.567	\$117.567	100.00%
Variable Burden	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
Fixed Burden	\$2,541.367	\$0.000	\$2,678.115	\$2,678.115	100.00%
Material Burden	\$0.000	\$0.000	\$0.000	\$0.000	0.00%
** Total **	\$7,091.853	\$0.000	\$7,441.515	\$7,441.515	

Item ID/Item Name	Required Qty	Issue Code	Issue Date	Issued Qty	Cost Amount
D3595-063-530 Rubber Cushion 0.63" wide x 5.30" Long	2.0000		9/25/2017	2.0000	\$2.072
D412-596-203TRN Crosstube Aft Extended Turning Detail	1.0000		7/19/2016	1.0000	\$4,587.067
D4909-1 Support	1.0000		9/25/2017	1.0000	\$312.993
D4910-1 Chaffing Shield	2.0000		9/25/2017	2.0000	\$22.467
MS21920-26 Clamp	4.0000		9/25/2017	4.0000	\$37.980
MS21920-28 Clamp	2.0000		9/25/2017	2.0000	\$39.989
Total Matl Amts:					\$5,002.568

Invoice Rout Seq ID Invoice Vendor ID VC-SKY001

Invoice ID	Invoice Line Nbr	Invoice Date	Invoice Unit Price	Invoice Qty	Invoice Amt
MWQ27356	9	7/28/2016 11:01:32 AM	111.29125	1.0000	\$111.291

Work Center CNC Bend 2

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
paul01												
	7/20/2016											
110			0.00	0.00	3.02	3.02	1.00	\$0.000	\$57.809	\$191.129	\$0.000	\$248.938
whit01												
	7/14/2016											
110			2.82	1.41	0.00	0.00	2.00	\$27.054	\$0.000	\$89.445	\$0.000	\$116.499
	7/20/2016											
110			0.00	0.00	3.97	3.97	1.00	\$0.000	\$76.069	\$251.498	\$0.000	\$327.567
Total:			2.82	1.41	6.98	6.98	4.00	\$27.054	\$133.878	\$532.072	\$0.000	\$693.003

Work Center Crosstubes

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
SHEL02												
	9/25/2017											
200			0.00	0.00	1.60	1.60	1.00	\$0.000	\$29.683	\$97.846	\$0.000	\$127.529
whit01												
	7/21/2016											
128			0.00	0.00	6.47	6.47	1.00	\$0.000	\$124.063	\$410.176	\$0.000	\$534.239
	7/25/2016											
130			0.00	0.00	5.70	5.70	1.00	\$0.000	\$109.328	\$361.463	\$0.000	\$470.791
Total:			0.00	0.00	13.77	13.77	3.00	\$0.000	\$263.074	\$869.485	\$0.000	\$1,132.558

Work Center SprayPaint

Employee ID	Rout Seq ID	Labor Date	Setup Hours	Actual Setup Hours	Labor Hours	Actual Labor Hours	Nbr of WOs	Setup Amount	Labor Amount	Fix Burd Amount	Var Burd Amount	Total Amounts
SHEL02												
	8/3/2016											
180			0.00	0.00	1.45	0.73	2.00	\$0.000	\$13.901	\$45.960	\$0.000	\$59.861
	8/4/2016											
180			0.00	0.00	0.82	0.41	2.00	\$0.000	\$7.825	\$25.872	\$0.000	\$33.697
180			0.00	0.00	0.58	0.29	2.00	\$0.000	\$5.519	\$18.247	\$0.000	\$23.766
	8/8/2016											
180			0.00	0.00	0.85	0.43	2.00	\$0.000	\$8.153	\$26.956	\$0.000	\$35.109
Total:			0.00	0.00	3.69	1.85	8.00	\$0.000	\$35.398	\$117.034	\$0.000	\$152.433

Work Order ID 148993

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U/R

148993

Page 1

Item ID: D412-596-203 Accept *N900040100* Setup Start *NS1*

Revision ID: URF 14-644 Stop *NS2*

Item Name: Stainless Steel Aft Crosstube - Extended Height 39"

Start Date: 7/14/2016 Start Qty: 1.00 *1*

Required Date: 8/2/2016 Req'd Qty: 1.00 *1*

Reference: Cust Item ID:

Customer:

Approvals: Process Plan: SA Date: 7/14/16 Tooling: _____ Date: _____ Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D412-596-203	B U/R <u>OK</u> <u>9/16/17/14</u>								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPPD412-596-203		CHG001						
110		0.02							
110	BENDING MACHINE - CROSSTUBES								
CNC Bend 2	Memo	0.52							
CNC Alpha 160 Bender	Bend tube as per Dwg D412-596-203 using CNC bender program _____ and Folio FT _____								
	USE (4) DT9824 SHIM BLOC TO CHECK STRAIGHTNESS								
127	QC15- Crosstube Dimensional Check	0.00							
127									
QC	Memo	0.00							
Quality Control	***MARK CUT LINES***								

D412-596-203/148993

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 148993***148993***

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Item ID: D412-596-203 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: URF 14-644 Stop ***NS2***
Item Name: Stainless Steel Aft Crosstube - Extended Height 39"
Start Date: 7/14/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 8/2/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
128		0.00							
128									
Crosstubes	Memo	0.17							<u>① 16-07-21 PD</u>
Crosstubes	CUT TUBE AT HEIGHT ON FAI SHEET								
	VERF HEIGHT <u>36.130</u> BY QC 15 LEVEL INSPECTOR <u>PD</u>								
	VERF TWIST <u>0.339</u> BY QC15 LEVEL INSPECTOR <u>PD</u>								
130		0.00							
130									
Crosstubes	Crosstubes								<u>Jew 16-07-26</u>
Crosstubes	Memo	0.37							
	1- Engrave Part # and Batch # as per Dwg D412-596-203								
	2-Remove all marks from tube within limits of D412-596-203 DWG.								
140		0.00							
140									
QC	QC6- Inspect dimensions to drawing	0.00							<u>i</u>
Quality Control	Memo	0.00							<u>DAS 38 9-89</u> JUL 26 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

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Item ID: D412-596-203 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: URF 14-644 Stop ***NS2***
Item Name: Stainless Steel Aft Crosstube - Extended Height 39"
Start Date: 7/14/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 8/2/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
174	Outsource process - NDT per QSI038 4.1	0.00							
174									
Outsource2	Memo	30.00							
Outsource process - NDT	ISSUE P/O TO ACCUREN: <u>3369</u>								<u>16.07.26</u>
176	Receive & Inspect for Damage & Mat'l Certs	0.00							
176									
Packaging	Memo	0.00							<u>16.07.26</u>
Packaging									
178	QC5- Inspect part completeness to step on W/O	0.00							
178									
QC	Memo	0.00							
Quality Control									<u>16/10/03</u>

DAS
16
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐				

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

Work Order ID 148993

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Item ID: D412-596-203 **Accept** ***N9000040100*** **Setup** **Start** ***NS1***
Revision ID: URF 14-644 **Stop** ***NS2***
Item Name: Stainless Steel Aft Crosstube - Extended Height 39"
Start Date: 7/14/2016 **Start Qty:** 1.00 ***1*** **Cust Item ID:**
Required Date: 8/2/2016 **Req'd Qty:** 1.00 ***1*** **Customer:**
Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	Crosstubes	0.00							DAS 41 9-89
2000	Crosstubes					1			
Crosstubes									
	★ PRO Memo 1- Install center support using scotch-weld DP460 per QSI 015, as per DWG. note 12. A/R scotch-weld DP460 BATCH #: <u>136223</u> <u>exp 11/17</u> 2- Install clamp with rubber cushion as per DWG. note 13 3- Abrade mating surfaces of support and crosstube with 400 grit sandpaper, clean the area with 4105S wash 'n' wipe 4- **IF NOT ALREADY PRESENT ON CHAFFING SHEILD.** Apply a thin coat of proseal 890 per QSI 015 on inside concave surface of chafing shield and let cure per manufacturer's instructions. Install prosealed chafing shield onto crosstube by applying a thin coat of proseal 890 onto crosstube. Be sure to eliminate any air gaps. A/R Proseal 890 Batch: <u>137495</u> <u>exp 1/18</u> 5- Install supports clamps using DT <u>5</u> as per Dwg D412-596-203, Torque clamps on support to 80-100 IN-LBS. Torque clamps on chafing shield to 40-50 IN-LBS. START CURE TIME: <u>17-9-25</u> FINISH CURE TIME: <u>17-9-26</u> PRIOR TO PACKAGING RE-CHECK TORQUE ON CLAMPS AFTER CURED FOR 24H.	0.27							SEP 25 2017

SEP 25 2017

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only



Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : <u>16/7/14</u>	Step #: <u>200</u>	QTY Effective :		MRB (QSI042) Approval <u>DAS</u> <u>12</u> <u>9-89</u> <u>16/7/14</u>	
Description Work Order Deviation		Disposition		Completed By <u>DAS</u> <u>12</u> <u>9-89</u> <u>16/7/14</u>	
<u>Install MS2120 clamp so mechanism is on top of cross tube.</u>		<u>Acceptable.</u>		Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 148993

July 14, 2016 9:52:32 AM

148993

Page 6

Item ID: D412-596-203 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: URF 14-644 Stop ***NS2***
Item Name: Stainless Steel Aft Crosstube - Extended Height 39"
Start Date: 7/14/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 8/2/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210 *210* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo PRIOR TO PACKAGING RE-CHECK TORQUE ON CLAMPS AFTER CURED FOR 24H.	0.00 0.00				1		DAS 19 9-89	EB 17-09-27
240 *240* Packaging Packaging	Packaging Memo Identify and pack for shipping as per PPPD412-596-203 Location: _____ PPP Rev: _____	0.00 0.00							
250 *250* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.02							

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

July 14, 2016 9:52:43 AM

Page 1

Work Order ID: 148993

148993

Parent Item: D412-596-203

D412-596-203

Parent Item Name: Stainless Steel Aft Crosstube - Extended Height 39"

Start Date: 7/14/2016

Required Date: 8/2/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE JFS 13/03/22 VERIFY BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3595-063-530 *D3595-063-530* Rubber Cushion 0.63" wide x 5.30" Long		Manufactured	No				Each	30.0000	**	2	DAS 41 9-89	SEP 2 5 2017	
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>		2			
				FG			1						
				82656			1						
				LG051			1						
				132515			1						
				LG052			28						
				138921			7						
				144882			21						
D4909-1 *D4909-1* Support		Manufactured	No				Each	6.0000	**	1	DAS 41 9-89	SEP 2 5 2017	
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>		1			
				LG053			6						
				135507			2						
				140154			4						
D4910-1 *D4910-1* Chaffing Shield		Manufactured	No				Each	22.0000	**	2	DAS 41 9-89	SEP 2 5 2017	
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				LG053			22						
				139520			4						
				141315			9						
				145701			9						
				152233						2			

Picklist Print

July 14, 2016 9:52:43 AM

Page 2

Work Order ID: 148993

148993

Parent Item: D412-596-203

D412-596-203

Parent Item Name: Stainless Steel Aft Crosstube - Extended Height 39"

Start Date: 7/14/2016

Required Date: 8/2/2016

Start Qty: 1.00

Required Qty: 1.00

MS21920-26

Purchased

No

Each

37.0000

4

DAS

41

9-89

SEP 25 2017

MS21920-26

Clamp

**

Location

Loc Qty

Loc Code

LG057 135948

37

4

M132045

1

M133577

20

M134502

16

MS21920-28

Purchased

No

Each

137.0000

2

DAS

41

9-89

SEP 25 2017

MS21920-28

Clamp

**

Location

Loc Qty

Loc Code

FG

1

105884

1

LG050

115

M135007

40

M135008

25

M135009

50

LG051

1

M132169

1

LG057

2

M134130

2

st543

18

M135007

18

July 14, 2016 9:52:43 AM

Shop Packet Print

Page 2

Picklist Print

July 14, 2016 9:52:43 AM

Page 3

Work Order ID: 148993

148993

Parent Item: D412-596-203

D412-596-203

Parent Item Name: Stainless Steel Aft Crosstube - Extended Height 39"

Start Date: 7/14/2016

Required Date: 8/2/2016

Start Qty: 1.00

Required Qty: 1.00

D412-596-203TRN

Manufactured No

110

Each

4.0000

1

1

D412-596-203TRN

Crosstube Aft Extended Turning Detail

Location

Loc Qty

Loc Code

LG003

4

135132

1

135133

1

135134

1

135135

1

① JW 16-07-19

July 14, 2016 9:52:43 AM

Shop Packet Print

Page 3

Under Review Notification

148993
7/14/16
SU

Raised By: C Provencal

Product #: D205-594

Date: 14.10.20

Product Name: Extended Height Crosstubes

Part Number	Drawing/Document	"Y" or "N" Required								Instructions
		HOLD SHIPMENT	Red Tag/Quarantine Stock	Advise customers	Stop Production	Re-Work Stock	IPP Under Review	Blue File Under Review	ECN # Required	
D205-596-101	D205-596-101 rev. B	N	N	N	N	N	Y	N	14-644	
D205-596-103	D205-596-103 rev. B	N	N	N	N	N	Y	N	14-644	
D205-596-105	D205-596-105 rev. B	N	N	N	N	N	Y	N	14-644	
D205-596-107	D205-596-107 rev. B	N	N	N	N	N	Y	N	14-644	
D412-596-203	D412-596-203 rev. B	N	N	N	N	N	Y	N	14-644	

Description of issue:

- dwgs will be updated to flip orientation of MS21920 clamp on supports, so clamping mechanism is on top of the tube.
- new crosstubes from this point on should use new clamp orientation

Distribution:

General Manager
Production Manager
Director Quality Assurance
Design Manager

Chief Engineer
Engineering Project Managers
Engineering Clerk
Marketing

Item	Qty -203	Part Number	Description
1	X	D412-596-203	CROSSTUBE ASSEMBLY (412 HI HI AFT)
2	1	D6020-170	CROSSTUBE MATERIAL
3	2	D3595-063-530	RUBBER CUSHION
4	1	D4909-1	SUPPORT
5	2	D4910-1	CHAFING SHIELD
7	4	MS21920-26	CLAMP
8	2	MS21920-28	CLAMP
9	A/R	SCOTCH-WELD DP460	EPOXY ADHESIVE, 3M SCOTCH-WELD
10	A/R	PROSEAL 890	SEALANT

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6020-170
FINISHED LENGTH = 161.38±0.060 (BEFORE BENDING/TRIMMING)
- 2) FINISH: PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
MASK UNDERSIDE OF CROSSTUBE AS SHOWN (ZN B6-2, HATCHED AREA)
PAINT OUTSIDE PER DART QSI 005 4.2
AFTER PAINTING, REMOVE MASKING AND APPLY MATTE CLEAR COAT PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.006 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART P/N "D412-596-203" AND B/N ON INSIDE OF CUFF PER DART QSI 044 6.4 (VIBRATING STYLUS)
- 7) WEIGHT: 191.1 lb RAW MATERIAL, 118.3 lb AFTER MACHINING
118.0 lb FINISHED WEIGHT
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.006" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.

BENDING

- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 7% (BASED ON O.D.) IN LOWER HALF OF R35 BEND AND 8% (BASED ON O.D.) ON REMAINING TUBE.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038. TO BE PERFORMED AFTER FINAL POST-BEND GRINDING. ANY ADDITIONAL GRINDING REQUIRES ANOTHER LPI INSPECTION.

ASSEMBLY

- 12) INSTALL D4909-1 CENTER SUPPORT USING A 0.04" TO 0.07" THICK LAYER OF SCOTCH-WELD DP460 PER QSI 015.
- 13) INSTALL MS21920-28 CLAMPS WITH D3595-063-530 RUBBER CUSHIONS TO SECURE THE D4909-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE SUPPORT.
- 14) IF NOT ALREADY PRESENT ON CHAFING SHIELD, APPLY A THIN COAT OF PROSEAL 890 ON INSIDE CONCAVE SURFACE OF D4910-1 CHAFING SHIELD AND LET CURE PER MANUFACTURER'S INSTRUCTIONS. INSTALL PROSEALED D4910-1 CHAFING SHIELD ONTO CROSSTUBE BY APPLYING A THIN COAT OF PROSEAL 890 ONTO CROSSTUBE. BE SURE TO ELIMINATE ANY AIR GAPS.
- 15) TORQUE CLAMPS ON D4909-1 SUPPORT 80 TO 100 IN-LB. TORQUE CLAMPS ON D4910-1 CHAFING SHIELD 40 TO 50 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER ADHESIVES HAVE CURED FOR 24 HOURS.

7/14/16
Sta 148993

UNDER REVIEW OK
11/17/16
URF 14-601 4/4/14

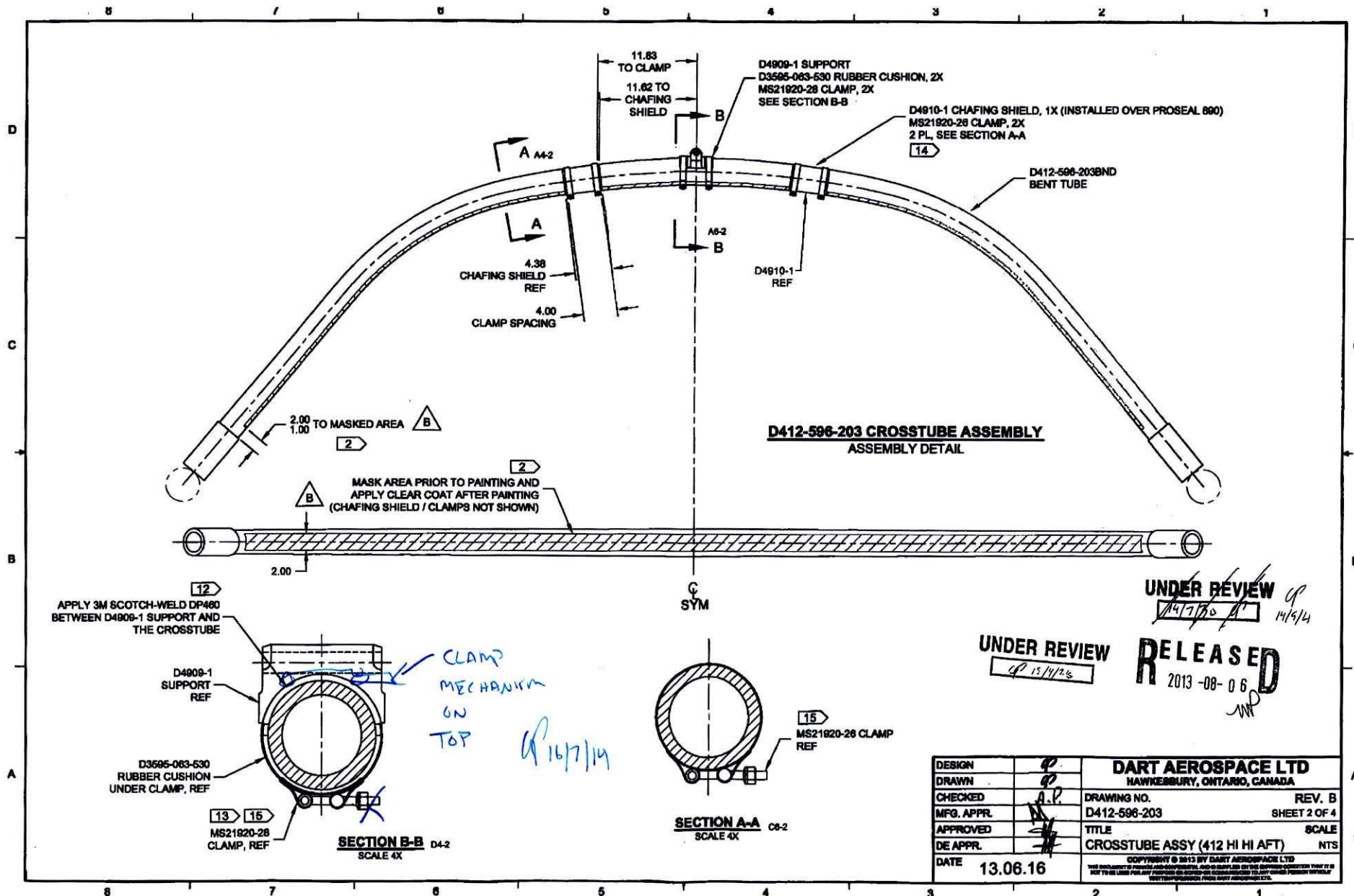
UNDER REVIEW

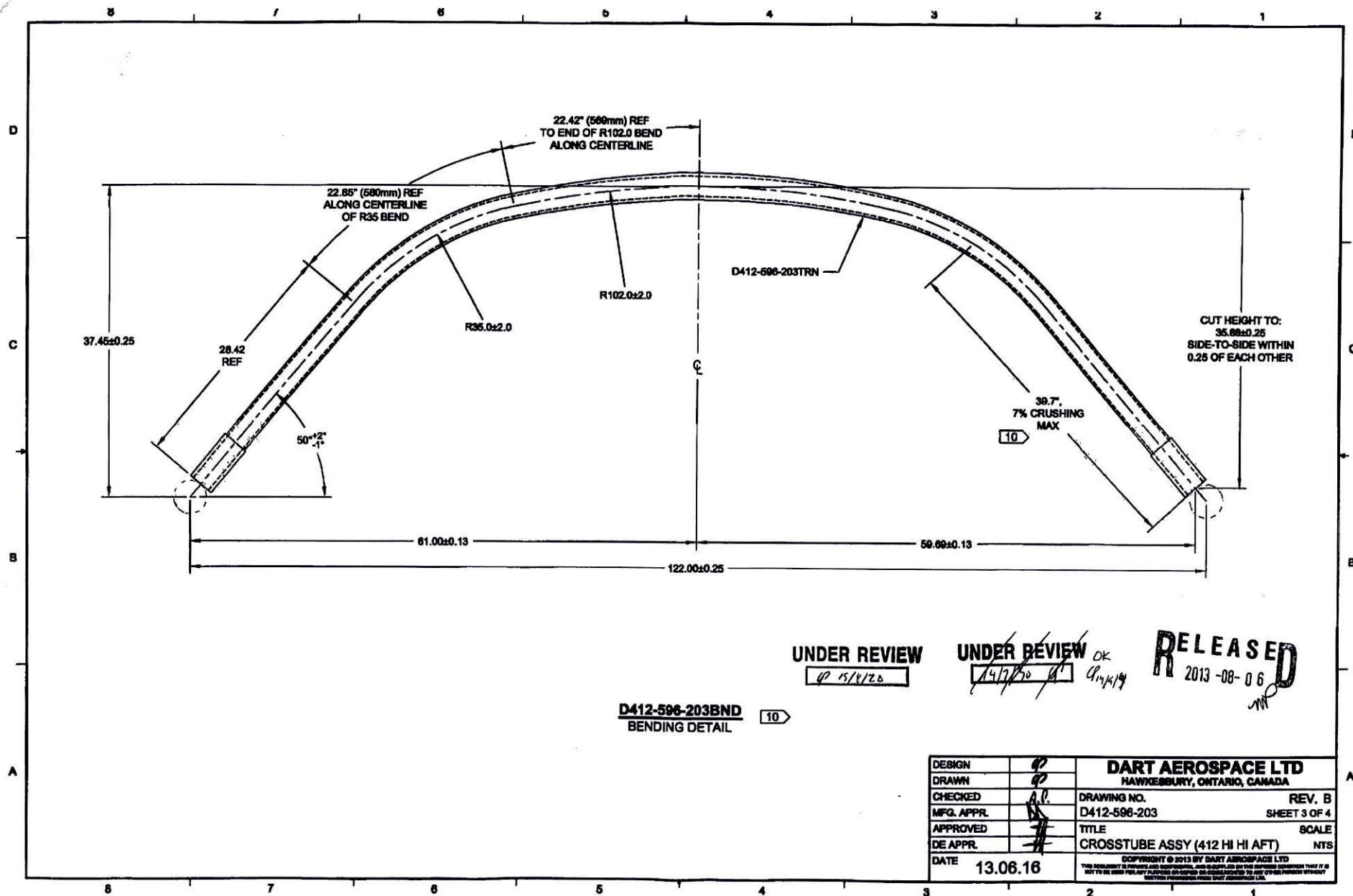
15/14/23
URF 15-561

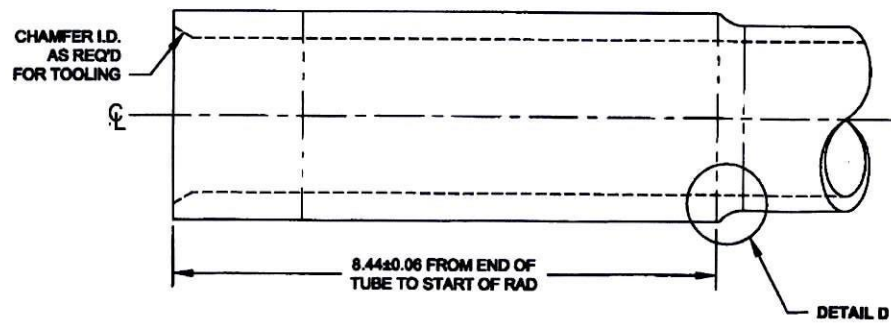
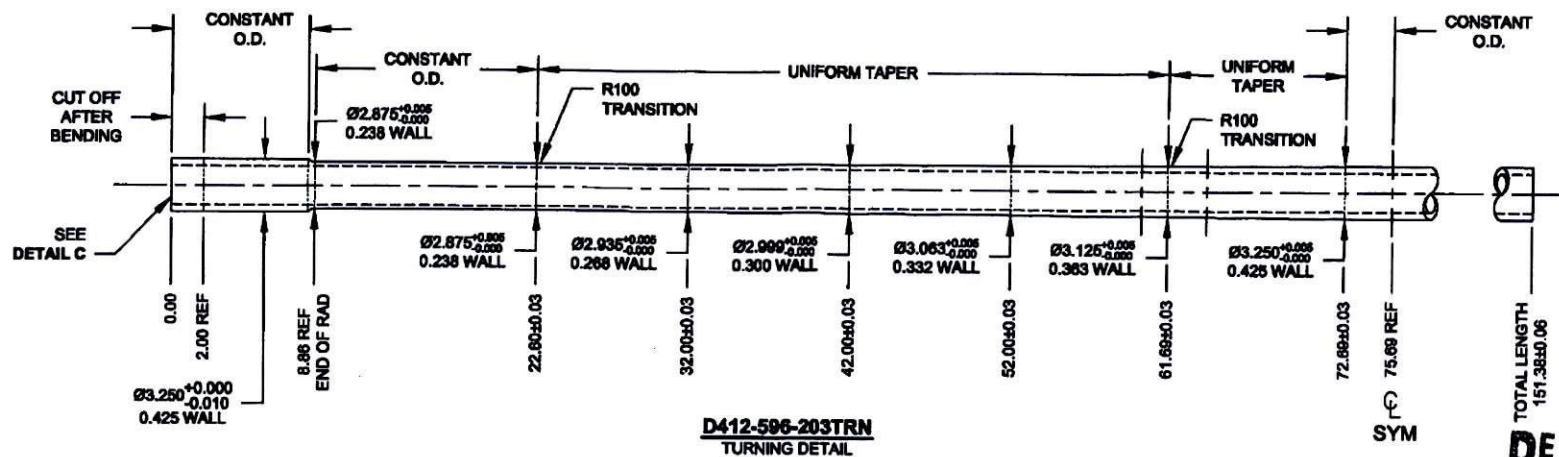
RELEASED
2013-08-06
MD

B	ADD INSPECTION WINDOW (ZN C8-1, B6-2)	CP	13.06.16
A	NEW ISSUE	CP	13.03.13
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.06.16		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D412-596-203	REV. B SHEET 1 OF 4
TITLE CROSSTUBE ASSY (412 HI HI AFT)	SCALE NTS
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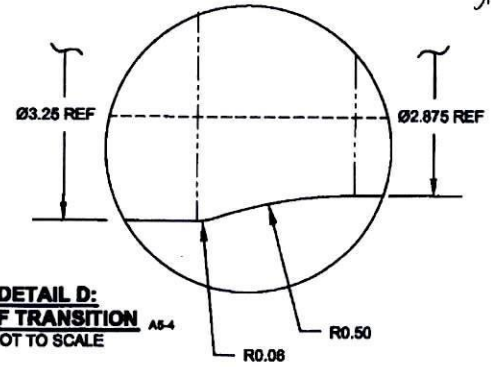






DETAIL C:
CUFF TRANSITION C8-4
 SCALE 4X

DETAIL D:
CUFF TRANSITION A5-4
 NOT TO SCALE



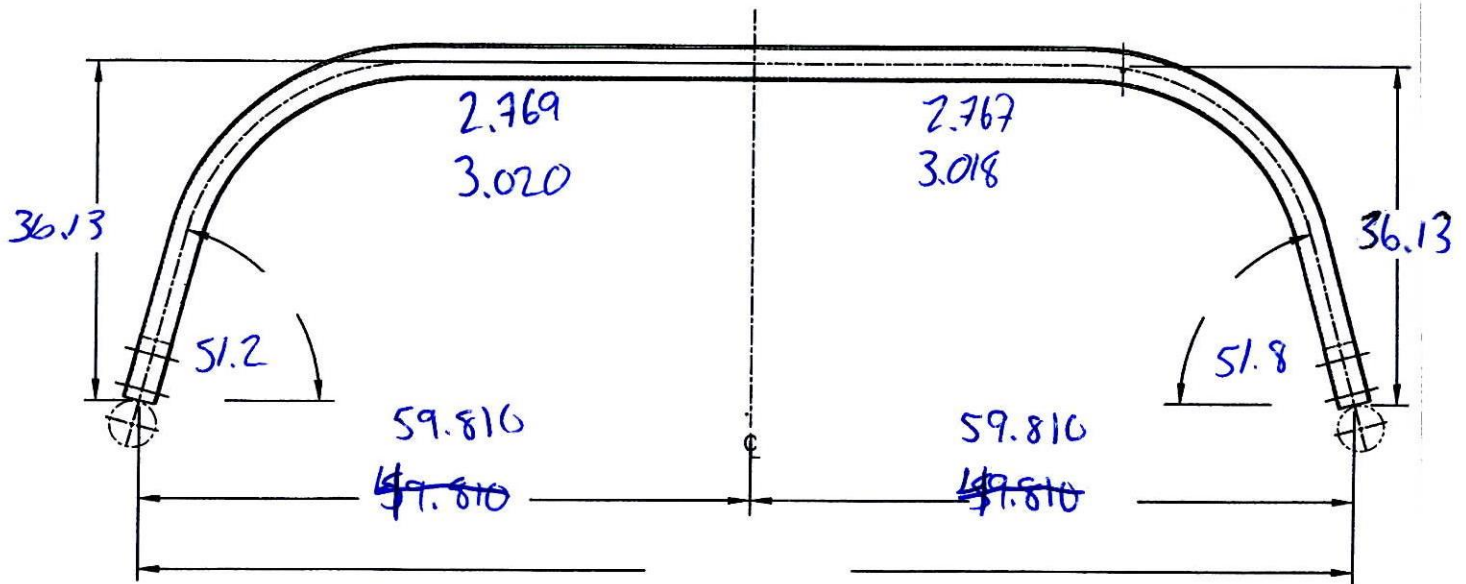
UNDER REVIEW
 15/4/25

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D412-596-203	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		CROSSTUBE ASSY (412 HI HI AFT)	NTS
DATE	13.06.16	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND IS RELEASED ON THE BASIS OF THE ACCESS TO INFORMATION ACT / NOT TO BE RELEASED FOR THE PURPOSE OF THE ACCESS TO INFORMATION ACT / NOT TO BE RELEASED FOR THE PURPOSE OF THE ACCESS TO INFORMATION ACT	

CK 14/4/4
 UNDER REVIEW
 RELEASED
 2013-08-06

DART AEROSPACE LTD	Work Order: 148993
Description: Stainless Steel Aft Crosstube Extended 4.59"	Part Number: D412-596-203
Inspection Dwg: D412-596-203 Rev: B UIR.	Page 1 of 1

Required Dimension	Min	Max
Height	35.63	36.13
1/2 Span	59.56	59.82
Angle	49	52
Total Span	119.12	119.64
Bending Passes	8	-
Crushing	-	7%



	Side A	Side B
Bending Passes	28	26
Crushing	4.3%	4.3%
Comments		

QC15 Inspection	PD
Date	16-07-21

Rev	Date	Change	Revised by	Approved
A		New Issue		
B	06.09.19	Reformat; QC level revised	KJ/JM	
C	07.02.06	Reformat	KJ/JM	
D	12.02.15	Added bending passes and crushing	KJ	
E	12.03.07	Revised comments table	KJ	



skyservice Work Order Traveler

Sky Service F.B.O. Inc.

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO28940	Customer: Dart Aerospace Ltd	Dept: NDT YUL	Reference: 33169
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	

Task: UNSCHEDULED	Sequence: 1
-------------------	-------------

Work Required:

CARRY OUT NDT INSPECTION (LIQUID PENETRANT) ON 8 CROSSTUBES

ITEM ID: D412-596-203 STAINLESS STEEL AFT CROSSTUBE - EXTENDED HIGHT 39 (QTY 2)

1 - WORK ORDER ID#: 148993 *5/16/10/13*

2 - WORK ORDER ID#: 148710

ITEM ID: D412-664-403 412 STAINLESS STEEL AFT CROSSTUBE - HIGH (QTY 1)

3 - WORK ORDER ID#: 139982

ITEM ID: D407-667-205 AFT CROSSTUBE - HIGH 407 (QTY 5)

4 - WORK ORDER ID#: 148760

5 - WORK ORDER ID#: 148773

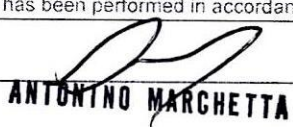
6 - WORK ORDER ID#: 148759

7 - WORK ORDER ID#: 148761

8 - WORK ORDER ID#: 148758

Action Taken:						Date:	Initial/Stamp:
LIQUID PENETRANT INSPECTION CARRIED OUT ON ITEMS LISTED ABOVE (ITEMS 1-8) AS PER ASTM1417M-13						JUL 26 2016	 DOT-APP 61 53-89
NO CRACK FOUND							
Pen: ZL-27A MWO5678 DEV: SKD-S2 MPO11715 CLEANER: SKC-S MPO13923 UV LIGHT M-20192							
Description	Location	P/N	Qty	Batch	S/N Off	S/N On	

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	 ANTONINO MARCHETTA	ACA/SCA Stamp	Date:
Name:			JUL 26 2016



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO33169**

Purchase Order Date 7/26/2016

PO Print Date 7/26/2016

Page Number 1 of 4

Order From :

VC-SKY001

SKYSERVICE
6120 MIDFIELD ROAD
MISSISSAUGA, ONTARIO L5P 1B1
CANADA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905-678-5636

Ship To Contact

Ship To Phone

Ship Via: Delivered

Ship Acct:

Buyer

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency CAD

FOB FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	71401-45	Procurement Quality Clause	7/26/2016 No 7/26/2016		1.00	\$0.00	\$0.00
	Procurement Quality Clauses A005 right of entry A012 chemical and physical test report A016 personnel qualification A017 raw material identification (as applicable) A026 certification of material conformance A041 quality management system A042 dart notification by supplier A043 retention of quality document						
Line Total:							\$0.00
2	148758	D407-667-205	7/26/2016 No 7/26/2016		1.00	\$125.00	\$125.00
LIQUID PENETRANT INSPECTION AS PER QSI 038 OR LPI AS PER ASTM 1417 LEVEL 2							

Note:

7/26/2016



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO33169**

Purchase Order Date 7/26/2016

PO Print Date 7/26/2016

Page Number 2 of 4

Order From :

SKYSERVICE
6120 MIDFIELD ROAD
MISSISSAUGA, ONTARIO L5P 1B1
CANADA

VC-SKY001

Ship To :

DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905-678-5636

Ship To Contact

Ship To Phone

Ship Via: Delivered

Ship Acct:

Buyer

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency CAD

FOB FCA - (Free Carrier)

Line Total: **\$125.00**

3	148761	D407-667-205	7/26/2016 No 7/26/2016	1.00	\$125.00	\$125.00
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LIQUID PENETRANT INSPECTION AS PER QSI 038 OR
LPI AS PER ASTM 1417 LEVEL 2

Line Total: **\$125.00**

4	148759	D407-667-205	7/26/2016 No 7/26/2016	1.00	\$125.00	\$125.00
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LIQUID PENETRANT INSPECTION AS PER QSI 038 OR
LPI AS PER ASTM 1417 LEVEL 2

Line Total: **\$125.00**

5	148773	D407-667-205	7/26/2016 No 7/26/2016	1.00	\$125.00	\$125.00
---	--------	--------------	------------------------------	------	----------	----------

LIQUID PENETRANT INSPECTION AS PER QSI 038 OR
LPI AS PER ASTM 1417 LEVEL 2

Note:

7/26/2016



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO33169**

Purchase Order Date 7/26/2016

PO Print Date 7/26/2016

Page Number 3 of 4

Order From :

VC-SKY001

SKYSERVICE
6120 MIDFIELD ROAD
MISSISSAUGA, ONTARIO L5P 1B1
CANADA

Ship To :

DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905-678-5636

Ship To Contact

Ship To Phone

Ship Via: Delivered

Ship Acct:

Buyer

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency CAD

FOB FCA - (Free Carrier)

Line Total: \$125.00

6	148760	D407-667-205	7/26/2016	1.00	\$125.00	\$125.00
			No			
			7/26/2016			

LIQUID PENETRANT INSPECTION AS PER QSI 038 OR
LPI AS PER ASTM 1417 LEVEL 2

Line Total: \$125.00

7	139982	D412-664-403	7/26/2016	1.00	\$125.00	\$125.00
			No			
			7/26/2016			

LIQUID PENETRANT INSPECTION AS PER QSI 038 OR
LPI AS PER ASTM 1417 LEVEL 2

Line Total: \$125.00

8	148710	D412-596-203	7/26/2016	1.00	\$125.00	\$125.00
			No			
			7/26/2016			

LIQUID PENETRANT INSPECTION AS PER QSI 038 OR
LPI AS PER ASTM 1417 LEVEL 2

Note:

7/26/2016



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO33169**

Purchase Order Date 7/26/2016

PO Print Date 7/26/2016

Page Number 4 of 4

Order From :

VC-SKY001

SKYSERVICE
6120 MIDFIELD ROAD
MISSISSAUGA, ONTARIO L5P 1B1
CANADA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905-678-5636

Ship To Contact

Ship To Phone

Ship Via: Delivered

Ship Acct:

Buyer

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency CAD

FOB FCA - (Free Carrier)

Line Total: **\$125.00**

9	148993	D412-596-203	7/26/2016	1.00	\$125.00	\$125.00
			No			
			7/26/2016			

LIQUID PENETRANT INSPECTION AS PER QSI 038 OR
LPI AS PER ASTM 1417 LEVEL 2

Line Total: **\$125.00**

PO Total: **\$1,000.00**

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 3

Change Date: 7/26/2016